

REMARKS

The Applicants wish to thank the Examiner for his consideration of the pending claims. Claims 1-30 are currently pending in the above-referenced application. In the Office Action mailed April 5, 2007, the Examiner has rejected 1-30.

Claims 1, 6, 13, 16, 18-22, 24, 29 and 30 stand rejected under 35 U.S.C. 103(a) as unpatentable over U.S. 6,345,168 to Pitts (Pitts) in view of U.S. 5,966,296 to Sullivan et. al. (Sullivan). The Applicants agree with the Examiner in that "Pitts does not disclose expressly turning the power to the charger on and off." but the Applicants disagree with the Examiner's statement that Sullivan "discloses turning the power to the charger on and off (see abstract, Fig 1, column 1 lines 53-58, column 2 lines 20 - column 3, line 15, and column 3 line 33-45)." It is well established that the ordinary meaning of a term refers to the ordinary meaning to a person skilled in the art at the time the application was filed after having read the claim term both in context of the claim and in the context of the entire specification. Sullivan does not describe a detach charger that "enables or disables said detach charger in response to a sheet weight of paper fed." All these sections state that power is supplied in a continual, uninterrupted operation that mimics a continuous operation of an AC power supply by using two DC supplies that are alternatively turned on and off. One skilled in the art would understand that this continual, uninterrupted operation is not turning the power to the charger on and off as described in the present application.

As discussed in the Applicants' application, and clearly understood by those skilled in the art, the words "enables or disables" in the claims of an application, when given their ordinary meaning using the specification as a basis of that meaning, are not rendered obvious by Pitts in view of Sullivan. Sullivan does not discuss turning off the detach charger at in response to the weight of a piece of paper. In the present invention the only information that is required is the weight of the paper, and specifically in the preferred embodiment, if the paper weight is above or below a limit. Accordingly the charger is turned on or off for the entire sheet. No differential treatment is needed and knowledge of the paper size is also not required. Nothing of this is discussed in Sullivan.

Sullivan discusses making an AC power supply using two DC power supplies. An AC power supply is a supply that generates a voltage waveform that

changes with time in a periodic manner. In electrophotography, a square wave power supply is frequently used for chargers since it is more efficient than, for example, a sine wave power supply. A square wave has a positive half cycle and a negative half cycle. The AC power supply will generate a positive voltage for a set amount of time (for example, in a product the positive half cycle for a primary charger power supply may approx X microseconds in length) and then switch to a negative voltage for an equal amount of time (also X microseconds in length). This pattern will be repeated continually as long as the charger is on.

Sullivan discusses building an AC power supply using two DC power supplies, one to provide the positive voltage and the other to provide a negative voltage. The purpose is to provide the operational advantages that come from operating the charger with an AC signal and the cost and size advantages that come from using DC supplies instead of AC supplies (smaller transformers, lower voltages, etc.). The sequence proposed is to take these two power supplies and have them work together in a specific way where one may be turned off but the power source, made up of the two DC power supplies working together, is not turned off as in the present application. When the charger is to be operated, the sequence is started by turning on (for example) the positive DC power supply and leaving the negative DC power supply off. At the appropriate time the positive DC power supply is turned off and the negative DC power supply is turned on so the negative half cycle can be realized. Repeating this pattern allows the two DC power supplies to mimic a continually operating AC power supply. One skilled in the art would understand that this sequence is very different from the turn off, turn on sequence that we discuss because Sullivan does not “expressly turning the power to the charger on and off“. In fact Sullivan is talking about mimicking the continuous operation of an AC power supply using two DC supplies that are alternatively turned on and off similar to Pitts. The purpose is continual, uninterrupted operation not that described and claimed in the present application.

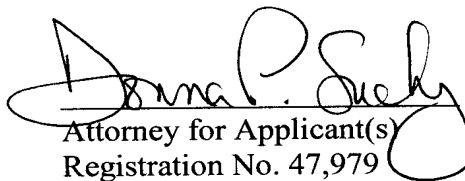
Independent claims 1, 11, 12, 13, 20, and claim 29 claim a detach charger that is enabled and/or disabled in response to a sheet weight of paper fed into the printing apparatus. The specification clearly describes that when the power supply is shut off (AC power) “the charger is not enabled” and that the charger “is enabled by applying an AC voltage to the charger wire”. (pg 8, lines 27-31). The specification continues to describe the enable signal that is sent when the weight

of the receiver sheet S is greater than the receiver weight limit. Accordingly, it is respectively submitted that Pitts in view of Sullivan and the other cited patents does not make the present claimed invention (independent claims 1, 11, 12, 13, 20, and 29) or the claims dependent thereon obvious.

The other cited art does not add anything to Pitts and Sullivan that would make it obvious to replace the DC signal used in Pitts with the "AC" control as claimed by the Applicants. In fact, as discussed above, Pitts does not even discuss controlling the AC and Sullivan uses dual DC circuits to mimic the continuous, uninterrupted AC power supply similar to Pitts. Finally, with respect to the other art cited, the Applicants respectfully submit that they do not provide sufficient objective motivation, for one of ordinary skill in the relevant art, to modify Pitts in the manner attempted.

In conclusion, Applicants respectfully submit that claims 1-30 are allowable in their present form, without a restriction, and hereby request such allowance. The Examiner is invited to call the undersigned in the event that a phone interview will expedite prosecution of this application towards allowance.

Respectfully submitted,


Attorney for Applicant(s)
Registration No. 47,979

Donna P. Suchy/tt
Rochester, NY 14650
Telephone: 585-722-9844
Facsimile: 585-477-1148

If the Examiner is unable to reach the Applicant(s) Attorney at the telephone number provided, the Examiner is requested to communicate with Eastman Kodak Company Patent Operations at (585) 477-4656.